

Impact of Weather to Our Operations
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#### **Ameren Missouri Overview**

In the energy business for over 100 years

Service territory includes 57 Missouri counties

3,600 employees

1.2 million electric customers

10,000 MW generation

127,000 natural gas customers

3,100 miles natural gas distribution and transmission mains





#### **Extreme Weather Conditions**

#### Electric System

Extreme heat and cold can cause heavy or over loading of circuits

Lightning and tornadoes can destroy equipment

High winds can snap poles and wires, and cause damage from fallen trees

Heavy rain and flash flooding can cause erosion around equipment

Ice can overload wires and structures causing catastrophic failure

Wet snow can cause damage to equipment due to trees falling through lines





April 2, 2006, Tornadoes

Damage in most of Ameren's territory in Missouri and Illinois

Significant tornado damage in Caruthersville, Braggadocio and Fairview Heights

285,000 customers without power, restored in 6 days

1,500 poles replaced









July 2006 Thunderstorms

July 19 - Storms hit St. Louis, St. Francois and Washington Counties

Widespread damage from trees

July 21 - Second storm hit as restoration efforts were underway

646,000 customers without power

All customers restored in 10 days









November 30, 2006, Ice Storm

Ice storm hit St. Louis area, St. Francois and Washington Counties and Central Illinois

392,000 customers without power

Restored in 9 days

January 13, 2007, Ice Storm

Ice storm hit St. Louis area, St. Francois and Washington Counties and Metro East

292,000 customers without power

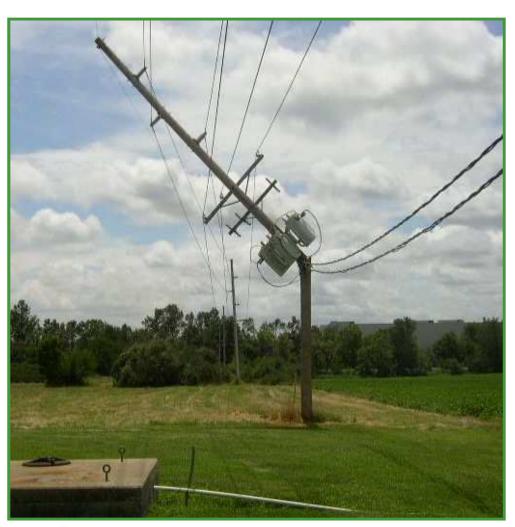
Restored in 5 days











August 13, 2007, Severe storm

Storms rolled through Jefferson County, Wentzville and St. Charles

Lightning and winds at 67 mph

110,000 customers without power

Damaged 47 distribution circuits

Restored in 3 days





December 9, 2007, Ice Storm

Ice storm hit Central Missouri

First major ice storm in this area in over 20 years

97,000 customers without power

Restored in 6 days









February 12, 2008 Ice Storm

Cape Girardeau and Scott City area covered with ice

Fallen trees pulled power lines to the ground

31,000 customers without electricity

4 days to restore













September 14, 2008, Wind & Rain

Remnants of Hurricane Ike swept across Southern Illinois and Southern Missouri

150,000 customers without power

Restored in 4 days





#### January 2009 Ice Storm

Up to 5" of ice accumulated on poles and wires in Missouri Bootheel

Affected 36,500 customers

35 substations without power

188 circuits needed repair

Replaced 3,800 poles and 1,440,000 feet of wire (273 miles)

Customers restored in 9 days



























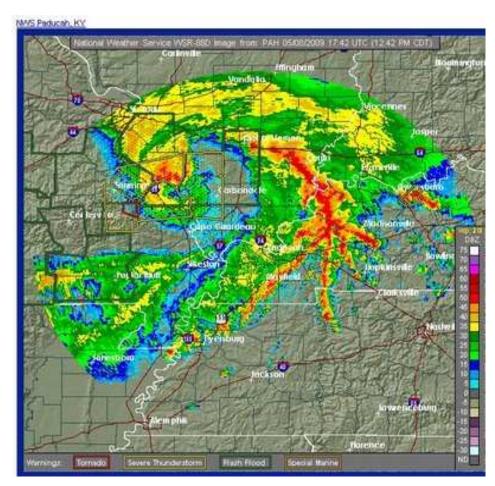
May 8, 2009, Inland Hurricane

Heavy rain and straight line winds moved across Southern Missouri and Southern Illinois

Straight line winds of 88 mph

Extensive damage to Taum Sauk Mountain and the construction site for the new reservoir

42,000 customers without power, restored in 6 days







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### Managing the Impact

**Ongoing System Management** 

Increased vegetation management - 4 and 6 years cycles

Commenced circuit inspection program – 4 year cycle

Pole inspection and treatment – 12 year cycle

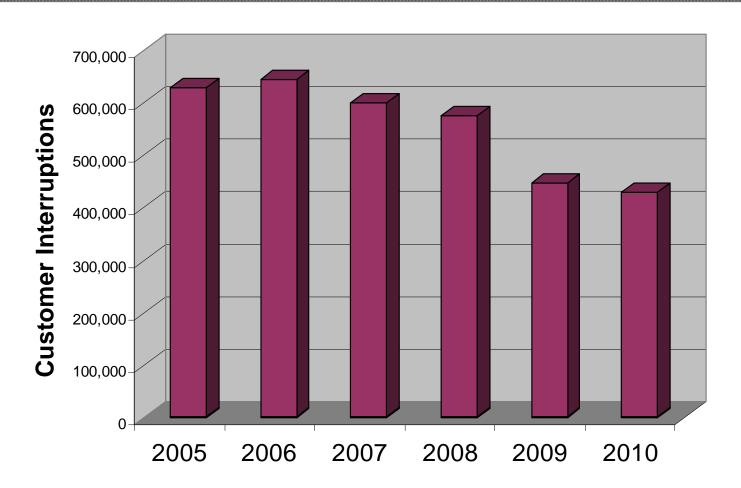
Device inspections – 6 month cycle

Aerial infrared inspections – Annually

Results – over 15 weather events in 2010 – most less than 20,000 customers without power - restored within 24 hours



### **Ameren Missouri Weather Related Outage Trend**





### Managing the Response

#### Response Management

Aggressive storm management to minimize outages

Mobilize more resources earlier for faster restoration

Stage storm trailers strategically across Ameren's system

Utilize mobile command centers

Activate logistical support – lodging, meals, etc.

Maintain a plan for excessive material needs

Invest in Resources On Demand system to manage logistics



#### **Dedication to Restoration**



Care for Our Storm Troopers

15,500 hotel rooms

2300 alternative sleeping arrangements

76,000 meals

1,250 loads of laundry

44 buses

8 separate restoration islands

Pride for a job well done



### **Questions?**

